

### **REMARKS**

Claims 1-8 are pending in the present application. Claims 1-3 are allowed, Claims 4-8 stand rejected, and Claims 1-8 stand provisionally rejected on the ground of nonstatutory double patenting. The Examiner is respectfully requested to reconsider and withdraw the present rejections in view of the amendments and remarks contained herein.

### **REJECTION UNDER 35 U.S.C. § 103**

Claims 4-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Enyedy (U.S. Pat. No. 5,938,949) in view of Hill (U.S. Pat. No. 3,061,709). These claim rejections are respectfully traversed.

Claim 4 has been cancelled, with traverse, and thus the rejection of this claim is now moot.

Each of the remaining claims, 5-8, require a gas control device within the torch head or maintaining gas pressure local to a torch head to allow gas pressure to build up local to the torch head for supply to the plasma arc chamber. These limitations are neither taught nor suggested by Enyedy or Hill.

Enyedy discloses a solenoid unit 202 that is de-energized to control a supply of gas to the underside of the piston 224 in order to move the electrode 208 away from the nozzle 196 for operation of the plasma arc torch. The gas is controlled solely for the purpose of moving the electrode 208 away from the nozzle during operation, and as such, does not provide gas control in accordance with the claimed invention. More specifically, the solenoid unit 202 does not allow gas pressure to build up local to the

torch head for supply to the plasma arc chamber and reducing start times.

Hill discloses a compact gas valve in the handle of a welding torch, merely for the purpose of turning on and shutting off the flow of shielding gas. As such, there is no disclosure of a gas control device within the torch head or a method of maintaining gas pressure local to a torch head to allow gas pressure to build up local to the torch head.

The standard for a 103 rejection "... is what the combined teachings, knowledge of one of ordinary skill in the art, and **the nature of the problem to be solved** as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 55 USPQ2d 1313 (Fed. Cir. 2000). [Emphasis added]. The nature of the problem to be solved in Enyedy is that of enabling safe operation of the torch with preliminary testing and cleaning (see, e.g., Col. 1, Lines 8-12). The nature of the problem to be solved in Hill is that of providing a valve in a torch handle for ease of operator use, which is smaller and lighter weight. (see, e.g., Col. 1, Lines 8-17). In stark contrast, the nature of the problem to be solved in the claimed invention is that of building up pressure local to a torch head for supply to the plasma arc chamber and reducing start times of a plasma arc torch.

Therefore, since Enyedy and Hill are directed to different problems to be solved and do not teach or suggest a gas control device within or proximate the torch head or a method of maintaining gas pressure local to a torch head to allow gas pressure to build up local to the torch head for supply to the plasma arc chamber and reducing start times of a plasma arc torch, Claims 5-8 cannot be obvious. Accordingly, Applicants respectfully request that these claim rejections be

withdrawn.

#### **DOUBLE PATENTING**

Claims 1-8 stand provisionally rejected on the ground of nonstatutory double patenting, and the Outstanding Office Action states that the conflicting claims have not yet been patented. However, copending Application No. 10/083,101 has now issued as U.S. Patent No. 6,689,983.

Accordingly, Applicants enclose herewith a terminal disclaimer to overcome the outstanding double patenting rejection. Therefore, Applicants respectfully request that the rejection of Claims 1-8 based on the ground of nonstatutory double patenting be withdrawn.

#### **CONCLUSION**

It is believed that all of the stated grounds of objection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding objections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this Response is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (314) 726-7524.

Respectfully submitted,

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